

**GUIDANCE DOCUMENT FOR SOC
USE WAIVER APPLICATION**

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Health Services
Department Of Human Services

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GUIDANCE DOCUMENT FOR MONITORING REDUCTION THROUGH A SOC USE WAIVER

INTRODUCTION

The 1986 Amendments to the Safe Drinking Water Act required that during the compliance period 1/1/93 through 12/31/95, all community and nontransient noncommunity public water systems have their water tested for the Phase II/V contaminants. A summary of these contaminants is provided in Table 1. Systems were required to monitor in four consecutive quarters of a calendar year unless the system was determined not susceptible to SOC contamination and a waiver from full monitoring was granted.

Repeat monitoring is required for the SOCs and VOCs. The frequency of this repeat monitoring is every three years for a system that has had no detections during any previous monitoring round. In this document, DWP has modified the susceptibility assessment process so that it can be used in substantially the same format **to reduce the monitoring frequency for a specific SOC monitoring method to once every 9 years** for those systems that can demonstrate that none of the SOCs covered by that monitoring method are used within their recharge area, or Drinking Water Protection Area (DWPA). In the text below, we will refer to the reduction of repeat monitoring from once every 3 years to once every 9 years, as "monitoring reduction".

Water systems should realize that some of the data, as well as the necessary maps, have been completed for the system during the Source Water Assessment program, due to be completed in mid-2005.

The assessment applies to both groundwater and surface water systems and includes a map illustrating the recharge area (DWPA) for wells and springs and the watershed area for surface water intakes. SOC use inventory focuses on those areas. Source Water Assessment maps that have been completed have been distributed to individual water systems. If you have any questions regarding the status of the assessment project for your system, please contact DWP at 541-726-2587.

What Do We Mean By Susceptibility?

A water system is susceptible to a particular contaminant if there is a possibility that the contaminant can gain access to the aquifer supplying the water system. The susceptibility of a given water supply, therefore, is a function of both the potential of the contaminant being used at the surface and how susceptible the aquifer is to downward migration of the contaminant.

Clearly, an aquifer cannot be susceptible to contamination by a specific SOC unless that contaminant has been used in the area. Further, an aquifer cannot be susceptible to contamination by a specific SOC unless the construction characteristics of the well or the combined hydrogeologic characteristics of the region and chemical nature of the contaminant make the aquifer susceptible to contamination.

The purpose of this document is to provide Oregon Public Water Systems with the procedures for conducting a susceptibility assessment with respect to potential use of the SOCs. In the discussion that follows, the required procedures for completing the use waiver are given in a step-by-step fashion.

MONITORING AND WAIVER OPTIONS

All systems must comply with their respective monitoring requirements. It must be understood, however, that it is not required that systems conduct a SOC waiver assessment. Systems may elect to conduct repeat monitoring each of their sources for all contaminants on the 3-year cycle. We recommend, however, that systems consider the benefits of completing an assessment. Not only is the assessment likely to reduce monitoring requirements, and therefore monitoring costs, but the system will benefit from an increased understanding of where their groundwater comes from and how it can become contaminated. In addition, the information that will be gathered during the analysis will be applicable to future assessments or to other programs with which public water systems may choose to be involved, e.g. the Drinking Water protection program.

USE CRITERIA

Use Waiver

Because of the widespread use of VOCs (e.g. solvents and fuels), monitoring reduction through the "use" waiver will apply primarily

to the SOCs (pesticides/PCBs). As a result, this document will address only SOCs with respect to the "use" waiver. Exceptions to the 'no "use" waivers for VOCs' policy are of course possible. Development of an application for VOC use waiver would follow the same procedures outlined below for pesticides. In addition, the SOC benzo(a)pyrene is not a pesticide and therefore the SOC waiver does not address this chemical.

The term pesticide is here applied to any chemical that is used for the purpose of eradication or control of any pest, including insects, plants and animals. The USEPA has defined "use" or "used" as "...the application, storing, distributing, disposing, or transporting..." of a pesticide in the area. This definition is intentionally broad in order to account for any possible method(s) through which a pesticide might enter the groundwater system. Although contamination of groundwater by pesticides is often conceived as being associated with the application of these chemicals at the surface, many believe that the most frequent cause of contamination is through accidental spills, poor management and improper disposal. Clearly, these latter causes of contamination may occur wherever pesticides are found, and are the basis for the definition above.

AREA WIDE WAIVERS

The U.S. EPA allowed States to propose area wide waivers based on geographic susceptibility assessments. Accordingly, we have established area-wide waivers for two Phase II/V contaminants: 2,3,7,8-TCDD (Dioxin) and asbestos.

Dioxin

Potential sources of Dioxin are not as widespread as those for other Phase II/V contaminants. The principle activities that may have Dioxin associated with them are listed below.

1. Pulp and paper manufacturing.
2. Disposal sites of past production of herbicides containing 2,4,5-trichlorophenol (2,4,5-T). This includes 2,4,5-T used in wood preservatives and hexachlorophene used as a germicide.
3. Wood treatment plants.
4. Chemical manufacturing plants that produce or have produced 2,4,5-trichlorophenol, 2,4,5-TP (Silvex) or hexachlorophene.
5. Municipal and industrial waste incineration facilities.

Surface water systems, in which there are now or have been in the past, any of the activities listed above, will be required to monitor their water for Dioxin. The potential for Dioxin to travel significant distances in groundwater is low owing to the contaminant's significant tendency to sorb onto organic matter. Therefore, systems drawing from groundwater will not be required to monitor for Dioxin, unless there source is hydraulically connected to surface water where Dioxin has been detected. In general, any system within 1000 feet of a surface water source will be considered by the Division to be potentially hydraulically connected to that surface water unless demonstrated otherwise. The Division has developed a series of procedures by which systems will be able to demonstrate whether or not they are in hydraulic connection with surface water (see below).

Asbestos

The principle sources of asbestos in drinking water are asbestos cement pipe (AC pipe) and natural deposits of asbestiform minerals. Systems will be exempt from monitoring for asbestos fibers in their water if they [1] document that they do not utilize AC pipe anywhere in their distribution system, and [2] are outside regions of known or suspected occurrences of asbestiform minerals.

Asbestiform minerals are associated with specific rock types found in only a few geologic terrains. Most commonly, these are metamorphic rocks such as serpentinite. In Oregon such terrains are found in the southwest and northeast part of the state. Based on published work by Mark Ferns and Len Ramp of the Oregon Department of Geology and Mineral Industries (DOGAMI Special Paper 18, 1988), we have determined the boundaries of those two regions.

Systems whose sources fall within the following two areas must submit to the Division a topographic map on which the well, spring or watershed is indicated. If a geologic unit in which asbestiform minerals could occur is associated with that source, the system will be required to initiate source monitoring for asbestos fibers.

1. Southwest Oregon. The southwest area is bounded by township 25 south (T25S) on the north and the California-Oregon border on the south. The western boundary is the Pacific Ocean, while range one east (R1E) forms the eastern boundary. The area includes all of

Curry and Josephine counties and portions of Coos, Douglas and Jackson counties.

2. Northeast Oregon. The northeast area is bounded by township six south (T6S) on the north and T17S on the south. The western boundary is the Grant County line, while the Snake River bounds the area to the east. The area occurs primarily within Grant and Baker counties.

We wish to stress that the geologic terrains that potentially would host asbestiform minerals make up only a small portion of either area 1 or 2. The fact that a system's source lies within the either area does not automatically mean that monitoring will be required.

DETERMINATION OF THE AREAS OF INVESTIGATION

Determination of susceptibility to SOC contamination is an option to both groundwater and surface water sources. Because of the different nature of these two sources, however, the area over which the study is directed differs markedly between the two.

Surface Water

In general, public water systems that derive their water from surface water intakes are not directly tapping into an aquifer. As a result, the principle effort towards the determination of SOC use will focus on the area that contributes water to the system. This process will require the delineation of the surface water watershed.

A watershed is the land surface that serves as a catchment for precipitation that ultimately ends up in a surface water drainage.

Precipitation that is not otherwise stored, evaporated, used in plant growth, or infiltrated to groundwater is directed downslope, eventually contributing to stream flow. The delineation of a watershed is commonly done by defining the topographic divides that surround the stream and its tributaries that supply the water system.

A similar approach should be taken for lake sources. Using a topographic map as a base, draw a line that separates drainage flowing towards the lake from those flowing away from the lake. Within the boundaries of the watershed, defined topographically, the flow of water at or very near the surface will be such that any surface contamination that is encountered by this water may be transported to the area of the surface water intake. Within a

watershed, shallow groundwater may also contribute to the stream's flow. This baseflow maintains perennial streams with water during periods of limited rainfall. In some areas of the United States, surface water has become contaminated as a result of baseflow from area groundwater itself carrying a contaminant load.

SOC use will be determined within the topographic limits of the watershed unless evidence is presented that supports using only a portion of the watershed (see below). In those areas where aerial spraying of pesticides occurs just outside the watershed area it is possible that because of prevailing winds at the time of spraying and/or small droplet size, aerial drift might allow for a portion of the applied pesticide to enter the watershed. Under these conditions, DWP recommends that the system include those pesticides to the inventory list unless the applicator's records indicate that spray drift would not have impacted the watershed.

Systems drawing water from a surface water source should realize that the Department of Environmental Quality has completed the delineation of the subwatershed area for your system. The map of this area has been provided in report form to the water system. SOC use inventory should be accomplished using that map. If you are unable to locate this map, please contact the DWP and we will assist you in obtaining a copy.

Groundwater

With respect to wells and springs, the area of investigation is defined here as the region around the wellhead or collection facility in which SOC use and aquifer susceptibility will be determined. It is important to note that the use and susceptibility areas may not exactly match. Of primary concern in susceptibility determination and drinking water protection is the recharge area or zone of contribution to the well whereas in the use determination, we are trying to evaluate an area large enough to describe the distribution of SOC use present and past.

1. Wells. The region of concern for susceptibility should reflect that area on the surface where water, percolating from the surface down to the aquifer, will eventually reach the well. The shape of the recharge area varies from circular to elongate, from narrow to wide, depending on the aquifer properties, the groundwater gradient, aquifer boundaries and pumping conditions. **The DWP has completed the delineation of the drinking water protection area (recharge area) for many groundwater systems in Oregon.** Copies have been distributed to the water systems.

Consideration of the well's recharge area is preferred for evaluating the potential of contamination from fixed sites, e.g. landfills, industrial waste discharge, underground storage tanks.

However, it does not adequately address the assessment of pesticide use. The reason for this is that crops are not fixed features. It is good agricultural management to rotate crops with time. Consequently, what crops are currently being grown and pesticides being used in the recharge area may not reflect all those that have been grown in the area in the past.

Some pesticides (and other SOCs) may persist for a number of years in the environment and their time of travel through the soil and vadose zones may be measured in decades. Therefore, in order to approximate historic pesticide use, it is necessary to choose an area for SOC inventory that "captures" the variability of crop rotation in the area. A circle with a radius of 1.5 miles (3.0 miles in diameter), centered on the wellhead will represent the area in which pesticide use from agricultural sources will be determined. This radius reflects our estimate of the distance from the wellhead necessary to represent the diversity of crop rotation practices.

This radius will be applied to all systems unless they can demonstrate that the agricultural practices in their areas require an area of different dimension. If systems use more than one well, each well will have to be evaluated for pesticide use within 1.5 miles of the wellhead. For purpose of the inventory reporting described below, these different areas can be considered together.

2. Springs. For those systems that derive their water from developed springs, the area of SOC inventory will be equivalent to a circle with a radius of 1.5 miles, centered on the spring location. It is a common, but often erroneous assumption, that the spring's recharge area is coincident with the surface water watershed in which the spring is located. Delineation of the recharge area for a spring will require that the geologic control that localizes the spring be identified and mapped. **As with wells, the DWP has completed the delineation of the recharge area for many spring-based water systems.**

3. Hydraulic Connection. Public Water Supplies producing from groundwater that has been determined to be in hydraulic connection with surface water will use the watershed area of the surface water body as the area of SOC inventory (see "Surface Water" above). Hydraulic connection implies that a transfer of water from the surface water to the aquifer providing water to the well is possible. Note that hydraulic connection is not the same as "direct influence of surface water". The latter term implies the

potential for movement of microorganisms such as bacteria, viruses and *giardia*, into the well water. Hydraulic connection relates to water movement and, as a result, the potential of dissolved constituents, including contaminants, into the well.

DWP has developed procedures for identifying systems where a groundwater source is in hydraulic connection with surface water. These are briefly discussed in the susceptibility section. Full documentation is available from the Division.

WAIVER APPLICATION PROCESS

Use Waiver

The purpose of the procedures outlined in this section is to determine which of those pesticides listed as regulated and unregulated in OAR 331-61-036 (3)(a) through (c) are currently being used or have been used in the past in the area of investigation around each well, wellfield or spring. (As indicated above, similar procedures may be followed to determine VOC use in the area.) A list of pesticides used in each area of SOC inventory will be compiled during the reconnaissance phase and checked and modified during the refinement phase.

A. Reconnaissance Phase Procedures:

1. System Location. If your system has had the delineation phase of the source water assessment completed, you may use that map as a starting point. If necessary, obtain a copy of a 7.5 minute series topographic map(s) that includes your system's well(s) or spring and surrounding area(s). If you are unable to determine which map(s) you need locally, call the DWP office and we'll find out for you. Topographic maps are available in many places in the State; virtually every community has a distributor. Consult the yellow pages under "Maps". Topographic maps are also available through the Nature of Oregon Information Center (731-4444) at the State Office Building, 800 NE Oregon Street in Portland. Prices vary but are approximately four dollars per sheet. Please note that you may have to purchase more than one map to include the entire area around your well(s) [see below].

2. Delineation of Area of SOC Inventory. If agricultural crops are grown within the area of concern, draw a circle with a radius of 1.5 miles around each well or spring, with the circle centered on the well or collection facility. Be certain that you use the correct scale on the map when you draw your circle. Note that on a 7.5 minute map, the scale is 1:24000. That means that 1 inch on

the map represents 24,000 inches (or 2000 feet, or 0.38 miles) on the ground. Therefore, one mile on the ground would be 2.64 inches on the map. As a result, a circle on the ground with a radius of 2.5 miles will be drawn on the map as a circle with a radius of 6.6 inches (see the diagram in the Appendix).

Take a ruler with you when you purchase your map(s) to be certain that you obtain all the maps required to delineate the area of SOC inventory around your well(s) or spring. It is quite possible that the area of inventory around your well may extend to an adjacent map. If you already have a copy of the map that includes your well, but not the neighboring ones that you need, the name of the adjacent map is given in parentheses () along the border of interest.

If the system has determined that they produce from a confined aquifer, an inventory must also be accomplished in the recharge area unless it can be demonstrated that the recharge area is outside a 10 year time of travel capture zone (see discussion of susceptibility below). The capture zone must be delineated using analytical methods based on regional gradient, estimated or measured hydraulic conductivity and effective porosity.

For a surface water source, that part of the watershed delineated by the DEQ must be evaluated for SOC use unless demonstrated otherwise (see above). Because a larger area is likely to be involved, the topographic maps may be reduced for easier handling.

3. Reconnaissance Survey. In this phase of the application, a survey of activities normally associated with pesticide use in the area is accomplished. You will also want to locate areas where pesticides are distributed, stored or disposed of during this phase. These facilities will be visited during the refinement phase. **Note that you are not required to visit or contact private land owners during either the reconnaissance or refinement surveys.**

a. Using the map of the delineated area, survey the area to determine:

1. If there are residential or domestic sites within the area where pesticides may be used (etc. gardens, lawns, ornamentals, etc.).

2. If crops are grown in the area, exclusive of vegetables grown in private gardens, and what those crops are. Given the definition of "use" provided by the USEPA and adopted in DWP's rules, there is no minimum acreage of crop grown in order to be

listed. If it is grown, it goes on the inventory. An exception to this would a situation where a crop has been grown organically, that is without the application of pesticides. If the grower supplies a letter attesting to that fact, the crop can be deleted from the inventory.

3. What rights-of-ways are found in the area, including State and County roads, railroads, and utility service lines.

4. If there are industrial sites within the area.

5. If there are areas of specific use (e.g. rangeland, irrigation canals, pasture, nurseries, golf courses, recreation) in the area.

6. If there is forest land (public or private) in the area.

b. Review the publication "Oregon Pesticide Use Estimates for 1987" by J.W. Rinehold and J.M. Witt, distributed by the Oregon State University Extension Service in 1989. Copies are available as publication number EM8507 from Oregon State University at the following address:

Publication Orders
Agricultural Communications
Oregon State University
Administrative Services Bldg. 422
Corvallis, Oregon 97331-2119

Contact Agricultural Communications at (503) 737-2513 the cost of the document.

Since the Rinehold and Witt compilation was completed, there has been local survey updates. Your local County Extension Agent will be able to tell you if an update is available for your county. Contact DWP if you wish to obtain approval to use an alternate source for use information. Using the section of the Extension document that was compiled for your county, determine which of the regulated and unregulated pesticides are listed under the following categories if applicable to your SOC inventory area. If you are uncertain as to whether a certain activity (e.g. vector control) has occurred in your area, contact your local extension office, county health department or DWP.

1. For each crop recognized in the inventory process listed in

3.a.2. above.

2. Industrial & Residential
3. Nursery
4. Rangeland & Pasture
5. Rights-of-Way (State Roads, Railroad, Utility)
6. Noxious Weed Control
7. Vector Control
8. Forest land
9. Recreational Areas
10. Golf Courses

c. Compile the pesticides obtained from the reconnaissance survey above into a preliminary list of pesticide use using form WF-1 (appendix).

B. Refinement Phase/Compilation of the Pesticide Use Base List.

In this phase of the process, the preliminary pesticide use list is refined by contacting those businesses or organizations that potentially use pesticides in the area.

1. Activity Survey. Survey the following, as appropriate, to determine what pesticides are now being, or have in the past been, actually used or distributed in the area. This information will be used to modify the preliminary list. In some cases, there will not be a distributor, dealer or applicator within the actual inventory area. In those cases, the nearest community, or other source of pesticides, should be included in the survey. The survey should consist of an interview with the appropriate individual and/or an inventory of pesticides distributed or used by the individual or organization. Keep records of these efforts using form WF-2 as you will need to provide documentation of them in the waiver application.

a. Agriculture Distributors/Dealers/Applicators of pesticides (consult feed stores, farm supplies, etc.)

b. Distributors/Dealers/Applicators of pesticides in the area for residential use (e.g. Home and Garden Centers, Hardware Stores, other retail outlets).

d. Licensed applicators in the area. You have been supplied with a list of commercial applicators in your county. It is not necessary to contact all, only those in your immediate area. Look in the yellow pages under "Exterminating", "Fumigating", "Pest Control", "Tree Service" or "Weed Control" to determine which individuals to contact.

e. Rights-of Ways. Contact State and County Highway Departments, Railroad, and appropriate utilities (electric, gas, telephone).

f. Specific industries that utilize pesticides (golf courses, nurseries, irrigation districts).

g. Forest Lands, public and private. Contact the Oregon Department of Forestry in Salem for data regarding history of pesticide use (data available by township, range and section).

2. Pesticide Base List. Compile a Pesticide Use Base List by modifying the preliminary list with the information obtained during the refinement phase. Modifications at this stage will consist primarily in adding chemicals to the preliminary list that you have determined are or have been used in the area. The lack of historical data on pesticide use (records have been required only recently), coupled with the often long travel time for pesticides to reach groundwater, does not permit us to remove contaminants from the preliminary list during the refinement phase. We are requiring that if a pesticide may have been utilized on a particular crop or by a particular activity, it should be on the final list, even if it is not currently being used. If a pesticide is not used in the area for two compliance periods (18 years) and has not been detected in groundwater in the area, it may then be removed from the base list.

3. Applying for the Use Waiver. Regulated and unregulated pesticides that are not on the base list, i.e. were not recognized during the inventory process, are eligible for a use waiver, provided an application for the waiver is submitted to, and approved by DWP prior to the designated year of monitoring. The information required for DWP's review of the Use Waiver application are as follows:

a. Provide a copy of the agency-provided source water assessment map, or 7.5 minute topographic map(s), or a legible photocopy, showing the location of the well(s), spring collection facility or surface water intake of the system and the 1.5 mile radius circle or watershed as appropriate.

b. Locate on the map the results of the reconnaissance survey, showing sites or activities potentially associated with pesticide use (e.g. forest land, specific crops, railroads, highways, residential areas, nurseries, etc.). This may be most easily done by assigning a specific number or letter to a crop or activity or feature, and indicating the location of that feature on the map with the number (see example). Staple the legend (e.g. 1 = corn; 2 = alfalfa; 3 = nursery, etc.) to the map.

c. Provide a list of potential pesticide use for each feature identified on the map, using the procedures outlined in 3. a. and b. above. Use copies of WF-1 for this purpose. This constitutes your preliminary list.

d. Using copies of form WF-2, document the effort made in refining the preliminary list. As indicated on the form, the information required includes the name of the activity (e.g. State highway rights-of-way, commercial pesticide application, agricultural chemicals distributor, etc.), which of those regulated and unregulated pesticides listed in DWP's rules are now being used or have been used in the past. The name and signature of the individual providing the information to the surveyor is also required. It is acceptable to mail these forms to the appropriate parties.

As stated above, you are not required to survey private individuals during this effort (e.g. home owners, farmers, ranchers, etc.). It is anticipated by the Division that the combination of a reconnaissance survey and a survey of pesticide distributors and licensed applicators (commercial, utilities, transportation, etc.) will result in a representative estimate of pesticide use in the area.

e. Compile the pesticide use base list on form WF-3 from the combined preliminary and refinement survey. Any pesticide that recognized as used on either or both of forms WF-1 and WF-2 should be listed on the base list.

C. PCBs

With respect to PCBs, systems should determine if activities commonly associated with the presence of PCBs are found in the area of investigation. Of greatest concern are hazardous waste sites and transformer stations. Systems should indicate whether or not these activities occur in the area of investigation using form WF-3.

In addition to determining potential sources of PCB contamination during the survey, the system must provide documentation to the Division whether equipment used in the production, storage or distribution of water contains PCBs (i.e. pumps, transformers, etc.).

D. Monitoring Option.

Those pesticides that occur on the pesticide use base list (form WF-3) are considered as potential contaminants to the Public Water Systems drinking water supply. The system will be required to monitor their water for those pesticides that make up the base list once every three years unless a subsequent susceptibility analysis indicates otherwise. For water systems with a Drinking Water Protection Plan that has been certified at the state level by the Department of Environmental Quality monitoring for the base list pesticides will be reduced to once every six years unless otherwise indicated by a subsequent susceptibility

As indicated above, as an alternative to full monitoring for those pesticides recognized as "used", the system may choose to determine if their aquifer is susceptible to contamination. The procedures for determination of the susceptibility of the system's aquifer include: [1] construction characteristics of the well and neighboring wells; [2] evaluation of the historical data regarding the source; [3] the geological characteristics of the region between the surface and the aquifer; [4] the availability of water at the surface; and [5] the chemical characteristics of the potential contaminants. Data provided by the sensitivity analysis during the Source Water Assessment will be useful should the system decide to apply. Those systems interested in the susceptibility waiver should contact the Drinking Water Program at 541-731-2587.

APPENDIX

- A. Use Waiver Preliminary Inventory Form (WF-1)
- B. Use Waiver Pesticide Use Inventory (WF-2)
- C. Pesticide Use Base List (WF-3)

**USE WAIVER
PRELIMINARY INVENTORY
WF-1**

Public Water System: _____ ID No: _____
Address: _____
City: _____ County: _____

Inventory Conducted by: _____ Date: _____
Telephone: _____

Map Locator ¹	Activity ²	Associated Pesticide(s) ³
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

1. Number or letter on map indicating location of this activity.

PESTICIDE USE¹ INVENTORY
WF-2

Public Water System: _____ ID No: _____
 Address: _____
 City: _____ County: _____

Activity Surveyed: _____
 Map Locator No. _____ Address: _____

Activity Contact: _____ Telephone: _____

Date Surveyed: _____ Surveyed by: _____

Indicate with a Y (yes) or N (no) if the following pesticides are currently being used, or have been used in the past. See Guidance Document for trade names.

Pesticide	Used	Pesticide	Used
1,2-Dichloropropane	_____	2,4-D	_____
Ethylene Dibromide	_____	Heptachlor	_____
Heptachlor Epoxide	_____	Lindane	_____
Methoxychlor	_____	Pentachlorophenol	_____
Toxaphene	_____	2,4,5-TP (Silvex)	_____
Alachlor	_____	Aldicarb	_____
Atrazine	_____	Aldicarb Sulfoxide	_____
Carbofuran	_____	Aldicarb Sulfone	_____
Chlordane	_____	Dalapon	_____

Dinoseb	_____	Diquat	_____
Endothall	_____	Endrin	_____
Glyphosate	_____	Oxamyl (vydate)	_____
Picloram	_____	Simazine	_____
Dibromochloropropane	_____	Aldrin	_____
Butachlor	_____		
Carbaryl	_____	Dicamba	_____
Dieldrin	_____	Hexachlorobenzene	_____
Use Inventory Continued		Activity:	_____
Public Water System:	_____		

Pesticide	Used	Pesticide	Used
Hexachlorocyclopentadiene	_____	3-Hydroxycarbofuran	_____
Methomyl	_____	Metolachlor	_____
Metribuzin	_____	Propachlor	_____
Di(2-ethylhexyl)-adipate	_____	Di(2-ethylhexyl)-phthalates	_____
2,3,7,8-TCDD (Dioxin)	_____		

1. Use is defined as the application, storage, transport, manufacture or distribution of a pesticide.

Comments: _____

The above list represents pesticide use at the activity indicated to the best of my knowledge.

Signature

Title or Position

Printed Name

PESTICIDE USE BASE LIST
WF-3

Public Water System: _____ ID No. _____
 Address: _____
 City: _____ County: _____
 Contact Person: _____ Telephone: _____

Indicate with a Y (yes) or a N (no) whether or not the pesticides listed below have or have not been used in the inventory area as indicated during the preliminary and refinement phases of the use survey. This list represents a compilation of forms WF-1 and WF-2.

Pesticide	Used	Pesticide	Used
1,2-Dichloropropane	_____	2,4-D_____	
Ethylene Dibromide	_____	Heptachlor	_____
Heptachlor Epoxide	_____	Lindane	_____
Methoxychlor	_____	Pentachlorophenol	_____
Toxaphene	_____	2,4,5-TP (Silvex)	_____
Alachlor	_____	Aldicarb	_____
Atrazine	_____	Aldicarb Sulfoxide	_____
Carbofuran	_____	Aldicarb Sulfone	_____
Chlordane	_____	Dalapon	_____
Dinoseb	_____	Diquat	_____
Endothall	_____	Endrin	_____
Glyphosate	_____	Oxamyl (vydate)	_____
Picloram	_____	Simazine	_____
Dibromochloropropane	_____	Aldrin	_____
Benzo(a)pyrene	_____	Butachlor	_____
Carbaryl	_____	Dicamba	_____

Dieldrin _____ Hexachlorobenzene _____

Use Base List Continued

Public Water System: _____

Pesticide	Used	Pesticide	Used
Hexachlorocyclo- pentadiene	_____	3-Hydroxycarbofuran	_____
Methomyl	_____	Metolachlor	_____
Metribuzin	_____	Propachlor	_____
Di(2-ethylhexyl)- adipate	_____	Di(2-ethylhexyl)- phthalates	_____
2,3,7,8-TCDD (Dioxin)	_____	PCBs	_____

List Compiled by: _____
(Printed Name)

(Signature)

Date: _____